

**In the Claims:**

1. (Currently Amended) A method for proactively monitoring a healthcare information system, the healthcare ~~communication~~-information system having a plurality of customer information systems, the method comprising:

configuring a memory device in each of the customer information systems of the healthcare information system, the memory device including a set of executable code; and

executing the set of executable code with a processor configured in each of the customer information systems, such that when the code is executed, the following steps are performed with a single proactive notification agent in any of the plurality of customer information systems in the healthcare information system, wherein the proactive notification agent communicates with any of a plurality of system module protocols:

polling a set of data from the healthcare information system with the proactive notification agent;

transforming the set of data into a plurality of counters;

monitoring one or more performance parameters of the healthcare information system by recording the values of the parameters by one of the plurality of counters;

comparing the value of the counters to thresholds; and

notifying a designated representative of the value of one of the plurality of counters exceeding one of the thresholds.

2. (Original) The method of claim 1, wherein the monitoring comprises polling the values of the parameters at a predetermined interval.

3. (Original) The method of claim 1, wherein said performance parameters comprise system performance parameters describing operational characteristics of the healthcare information system and business performance describing operational characteristics of data processed by the healthcare information system.

4. (Original) The method of claim 3, wherein the system performance parameters are selected from the group consisting of free space on disk drives, status of power supply, status of network card, status of print queues, status of database backups, transaction logs

of the database, number of outstanding database locks, status of SQL Server, status of SQL Server Agent, status of Microsoft Message Queue (MSMQ), status of Internet Information Server (IIS), network transaction throughput, CPU utilization, average response time of the user interface, repeated attempts to gain access to the system, and repeated attempts to gain unauthorized access to privileged data.

5. (Original) The method of claim 3, wherein the business performance parameters are selected from the group consisting of number of waiting patients, size of order entry queue, overdue diagnostic reports, and count of unresolved billing exceptions.

6. (Original) The method of claim 1, wherein the designated representative is an automated system.

7. (Original) The method of claim 1, wherein the designated representative is a user of the healthcare information system.

8. (Original) The method of claim 1, wherein the designated representative is a customer support representative of the healthcare information system.

9. (Original) The method of claim 1, wherein the notifying comprises routing a notification to a designated representative responsible for the healthcare information systems.

10. (Original) The method of claim 1, wherein the notifying comprises routing a notification to a designated representative responsible for the counter that exceeded the threshold.

11. (Original) The method of claim 1, wherein the threshold is defined by a user of the healthcare information system.

12. (Original) The method of claim 1, wherein the threshold is defined by a customer support system of the healthcare information system.

13. (Original) The method of claim 1, further comprising:  
receiving from the designated representative an acknowledgement of receipt of the notification and an instruction of an action to be performed on the healthcare information system;  
and  
performing the action to bring the value of the one of the plurality of counters back within the predetermined threshold.

14. (Original) The method of claim 1, wherein the notifying further comprises escalating the notification to a designated representative of a higher tier, when no acknowledgement is received after a predetermined period.

15. (Previously Presented) The method of claim 1, wherein the monitoring further comprises implementing one or more counter instances, capable of monitoring and recording specific aspects of one of the counters of the plurality of counters wherein the counter is a generic counter object.

16. (Original) The method of claim 1, wherein the comparing comprises transforming one of the performance parameters to a numeral, the numeral capable of being recorded by a counter.

17. (Original) The method of claim 1, further comprising displaying a user interface illustrating relationships between the counters and the thresholds.

18. (Currently Amended) A system for proactively monitoring a healthcare information system having a plurality of customer information systems, the system comprising:

a memory device configured in each of the customer information systems of the healthcare information system, the memory device including a set of executable code;

a processor configured in each of the customer information systems configured to execute the code, thereby effectuating the function of the following modules:

a single notification agent in each of the customer information systems, wherein the notification agent polls a set of data from the healthcare information system in any of the

plurality of customer information systems, wherein the proactive notification agent communicates with any of a plurality of system module protocols; and

a plurality of counters, each of which monitors one of a multiplicity of performance parameters by recording the values of the one parameter,

wherein the notification agent further notifies a designated representative of the value of one of said plurality of counters exceeding a threshold.

19. (Original) The system of claim 18, further comprising an operator, capable of performing an action, in response to an instruction from the designated representation that the action be performed on the healthcare information system, to bring the value of the one of the plurality of counters back within the threshold.

20. (Original) The system of claim 19, wherein the operator is a human, wherein the action is performed manually.

21. (Original) The system of claim 20, wherein the operator is an automated system, wherein the action is performed automatically.

22. (Original) The system of claim 18, wherein the plurality of counters poll the values of the performance parameters at a predetermined interval.

23. (Original) The system of claim 18, wherein the performance parameters comprise system performance parameters describing operational characteristics of the healthcare information system and business performance parameters describing operational characteristics of data processed by the healthcare information system.

24. (Original) The system of claim 23, wherein the system performance parameters are selected from the group consisting of free space on disk drives, status of power supply, status of network card, status of print queues, status of database backups, transaction logs of the database, number of outstanding database locks, status of SQL Server, status of SQL Server Agent, status of Microsoft Message Queue (MSMQ), status of Internet Information Server (IIS), network transaction throughput, CPU utilization, average response time of the user

interface, repeated attempts to gain access to the system, and repeated attempts to gain unauthorized access to privileged data.

25. (Original) The system of claim 23, wherein the business performance parameters are selected from the group consisting of number of waiting patients, size of order entry queue, overdue diagnostic reports, and count of unresolved billing exceptions.

26. (Original) The system of claim 18, wherein the designated representative is a human or an automated system.

27. (Original) The system of claim 18, wherein the designated representative is a user of the healthcare information system.

28. (Original) The system of claim 18, wherein the designated representative is a customer support representative of the healthcare information system.

29. (Original) The system of claim 18, wherein the notification agent is capable of routing a notification to a designated representative responsible for the counter of the plurality that exceeded the threshold.

30. (Original) The system of claim 18, wherein the notification agent is capable of routing a notification to a designated representative responsible for the healthcare information systems.

31. (Original) The system of claim 18, wherein the threshold is defined by a user of the healthcare information system.

32. (Original) The system of claim 18, wherein the threshold is defined by a customer support system of the healthcare information system.

33. (Original) The system of claim 18, wherein the one or more notification agents are further capable of escalating the notification to a designated representative of a higher tier, when no acknowledgement is received after a predetermined period.

34. (Original) The system of claim 18, wherein at least one of the plurality of counters is a generic counter object, wherein the generic counter object is capable of implementing one or more counter instances to monitor specific aspects of the corresponding performance parameters.

35. (Original) The system of claim 18, wherein at least one of the plurality of counters is capable of transforming one of the performance parameters to a numeral, the numeral capable of being recorded by a counter.

36. (Original) The system of claim 18, further comprising a first user interface, capable of illustrating relationships between the counters and the thresholds.

37. (Original) The system of claim 36, further comprising a second user interface, capable of illustrating relationships between the counters and the thresholds, wherein the first user interface is connected to a user of the healthcare information system, wherein the second user interface is connected to a customer support system of the healthcare information system.

38. (Original) A computer program product implementing the system of claim 18.

39. (Original) A computer readable medium having recorded thereon information on (i) the plurality of counters, (ii) the thresholds, and (iii) the designated representatives, of the system of claim 18.